

# UNITED STATES DETERTMENT OF COMMERCE Patent and Trad mark Office

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Washingt n, D.C. 20231

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.

 09/162,821
 09/29/98
 ERICSON
 R
 4167-11

PM82/0118

EXAMINER

RANDY G. HENLEY OTIS ELEVATOR COMPANY PATENT DEPARTMENT TEN FARM SPRINGS FARMINGTON, CT 06032 MCALLISTER,S

ARTUNIT PAPER NUMBER

3652

DATE MAILED:

01/18/00

PI as find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

# Office Action Summary

Application No. 09/162,821

Applicana(s)

**Ericson** 

Examiner

Steven B. McAllister

Group Art Unit 3652



Responsive to communication(s) filed on	
☐ This action is <b>FINAL</b> .	
Since this application is in condition for allowance except for in accordance with the practice under Ex parte Quayle, 1935	
A shortened statutory period for response to this action is set to is longer, from the mailing date of this communication. Failure tapplication to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a).	to respond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s) 15	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers  See the attached Notice of Draftsperson's Patent Drawing is/are object The drawing(s) filed on	is approved disapproved.  under 35 U.S.C. § 119(a)-(d).  f the priority documents have been  nber)  International Bureau (PCT Rule 17.2(a)).
Attachment(s)  Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper Notice Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-94 Notice of Informal Patent Application, PTO-152	<del></del>
SEE OFFICE ACTION ON T	THE FOLLOWING PAGES

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### **DETAILED ACTION**

#### Election/Restriction

- 1. Applicant's telephonic election of Group I (claims 1-14, drawn to Fig. 1) without traverse made by Randy G. Henley on January 7, 2000 is acknowledged.
- 2. Claim 15 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse telephonically by Randy G. Henley on January 7, 2000.

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 recite that the ends of the suspension rope are coupled "within an upper portion of the hoistway". This is ambiguous as to whether the ends are intended to be attached the hoistway or some other thing, e.g., the elevator car while residing in the upper portion of the hoistway. In examining the claims, the text was read as "to an upper portion of the hoistway".

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# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gale, Gale discloses an elevator shaft (col. 1, line 44); car C; counterweight 16,19; a drive motor at the bottom of the shaft (see Fig. 7) coupled to the car and counterweight via at least on piece of flat rope 13.

# Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

(0.5. 1,011,423)

8. Claims 2, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in (U.S. 975, 790) 5855 view of Pearson.

Gale shows a flat drive rope 13, but not a flat suspension rope. Pearson shows a flat suspension rope 20. It would have been obvious to one of ordinary skill in the art to modify the

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rope of Gale by making it a flat one as taught by Pearson in order to allow the pulleys to be lined with leather, making the system run quieter and avoiding slippage.

As to claim 5, Gale discloses deflector sheave 15, discloses that the drive rope is coupled to the bottom of the counterweight and car and extends between the two ends around the drive sheave and deflector sheave.

As to claim 9, Gale in view of Pearson discloses all elements of the claim except the drive rope making a second loop around the drive and deflector sheaves. However, it is well known in the art to use a double wrap drive. It would have been obvious to one of ordinary skill in the art to further modify the drive of Gale by making an additional loop around the sheaves in order to gain additional traction.

9. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Pearson as applied to claims 1, 2, 5, and 9 above, and further in view of White.

Gale in view of Pearson discloses all elements of the claim except a tension applying mechanism. White discloses a tension applying mechanism (see Fig. 2). It would have been obvious to one of ordinary skill in the art to further modify the deflector sheave of Gale as taught by White in order to maintain a controlled level of tension on the drive rope and prevent slippage.

10. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Pearson as applied to claim 1 and 2 above, and further in view of Aulanko et al (WO 98/29326).

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Gale in view of Pearson discloses all elements of the claim except use of the ropes are made of non-metallic man-made fibers, or urethane. Aulanko et al disclose the use of these

materials (page 2, lines 25-30). It would have been obvious to one of ordinary skill in the art to

further modify the apparatus of Gale by using the materials taught by Aulanko et al in order to

facilitate the use of smaller sheaves and to eliminate the possibility of corrosion of ropes.

Allowable Subject Matter

11. Claims 7, 8, 11, and 12 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

12. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the

base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.

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Steven B. McAllister

January 11, 2000

ROBERT P. OLSZEWSKI SUPERVISORY PATENT EXAMINE:

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